

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-505-B)

In re Application of:

Progulske-Fox

Serial No.: 09/980,845

Filed: August 4, 2000

For: Microbial Polynucleotides Expressed
During Infection of a Host

Examiner: Not Assigned

Group Art Unit: Not Assigned

RECEIVED

- 5 JUL 2006

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Legal Staff
International Division

TRANSMITTAL LETTER

- We are transmitting herewith the attached papers for the above-identified patent application:
 - Transmittal letter (in duplicate)
 - Request for Consideration of Petition Under 37 CFR §1.181(a);
 - Petition to Withdraw Holding of Abandonment Under 37 CFR §1.183;
 - Petition for Revival of Abandoned Application Under 37 CFR §1.137(b);
 - Appendices A - H
 - Return Receipt Postcard
- GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES:** Please charge any additional fees or credit overpayment to Deposit Account No. **13-2490**. A duplicate copy of this sheet is enclosed.
- CERTIFICATE OF MAILING UNDER 37 CFR §1.8:** The undersigned hereby certifies that this Transmittal Letter and the paper described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 12, 2006.

Void date: 08/23/2006 CKHLOK
08/23/2006 SBASHEIR 00000003 132490 09980845
01 FC:1462 400.00 CR
02 FC:2453 1500.00 CR

08/23/2006 SBASHEIR 00000003 132490

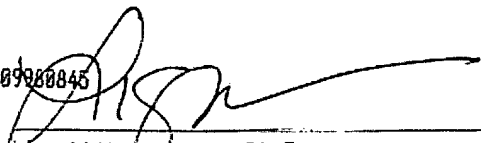
09980845

Dated: June 12, 2006

08/23/2006 SBASHEIR 00000003 132490

400.00 DA
1500.00 DA

By:


Lisa M.W. Hillman, Ph.D.
Reg. No. 43,673

08/23/2006 CKHLOK 00000017 132490 09980845
01 FC:1462 400.00 DA
02 FC:2453 750.00 DA

McDONNELL BOEHNEN
HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE, 32ND FLOOR
CHICAGO, IL 60606
(312)913-0001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-505-B)

In re Application of:)	
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Progulske-Fox)	
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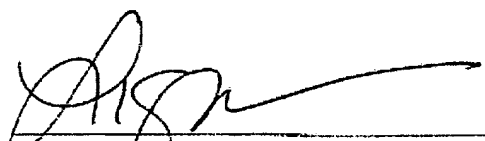
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

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3. **CERTIFICATE OF MAILING UNDER 37 CFR §1.8:** The undersigned hereby certifies that this Transmittal Letter and the paper described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 12, 2006.

Dated: **June 12, 2006**

By:


Lisa M.W. Hilman, Ph.D.
Reg. No. 43,673

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-505-B)

In re Application of:)	
)	
Progulske-Fox)	
	)	Examiner: Not Assigned
Serial No.: 09/980,845)	
	)	Group Art Unit: Not Assigned
Filed: August 4, 2000)	
	)	Conf. No. 3701
For: Microbial Polynucleotides Expressed)	
During Infection of a Host)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**REQUEST FOR RECONSIDERATION OF PETITION UNDER 37 CFR §1.181(A);
PETITION TO WITHDRAW HOLDING OF ABANDONMENT
UNDER 37 CFR §1.183; AND PETITION FOR REVIVAL OF ABANDONED
APPLICATION UNDER 37 C.F.R. §1.137(B)**

This paper is filed in response to the Decision mailed on May 5, 2006 in the above-mentioned application. Applicants respectfully request reconsideration of the Decision on the Petition filed under 37 CFR §1.181(a) and furthermore, in the alternative, Petition the Director under 37 CFR §1.183. In the alternative, Applicants petition for revival of the application under 37 C.F.R. §1.137(b).

- I. A Background Section begins on page 2 of this paper.
- II. A Request for Reconsideration of Petition for Withdrawal of Holding of Abandonment Under 37 C.F.R. §1.181(a) begins on page 4 of this paper.
- III. In the alternative, a Petition for Withdrawal of Holding of Abandonment Under 37 C.F.R. §1.183 begins on page 6 of this paper.
- IV. In the alternative, a Petition for Revival of Abandoned Application Under 37 C.F.R. §1.137(b) begins on page 8 of this paper.
- V. A conclusion begins on page 9 of this paper.

I. Background

A notification of missing requirements was mailed on February 28, 2002 (Appendix A) in the above-mentioned application. A response to the notice was filed on March 27, 2002 under the provisions of 37 CFR §1.8 and a stamped postcard was received from the Office indicating that the response was indeed received. *See*, Appendix B. The response included the required declaration, a paper copy of the sequence listing, a computer-readable form of the sequence listing, a statement under 37 CFR §1.821, and a fee. *See*, Appendix B.

On June 12, 2002 a notification of defective response was issued by the Office. *See*, Appendix C. The notification stated that the computer readable form filed with the application was found to be damaged and/or unreadable as evidenced by the attached CFR Problem Diskette Report. No CFR Problem Diskette Report was attached. The notification also stated that the computer readable form did not comply with the sequence listing requirements. A Raw Sequence Listing Error Report was attached to the notification. A response was timely filed by the applicants on June 24, 2002 under the requirements of 37 CFR §1.8. A stamped postcard was received from the Office to evidence receipt. *See*, Appendix D. It was the undersigned's good faith belief that all errors listed in the raw sequence listing error report were corrected in the response of June 24, 2002. *See*, Appendix D.

Two and one half years later, on January 3, 2005, another notification of defective response was received from the Office. *See*, Appendix E. The notification stated that (1) the content of the computer readable form submitted on June 24, 2002 did not comply with the requirement of Annex C as indicated by the attached marked up copy of the "Raw Sequence Listing"; and (2) that the computer readable form was found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. However, no Raw Sequence Listing Error Report or Diskette Problem Report was attached to the notification.

On January 24, 2005 the undersigned requested the Raw Sequence Listing Error Report and/or Diskette Problem Report from Examiner Vonda Wallace via both phone and facsimile. *See*, Appendix F. No response was received from Examiner Wallace. Since no extensions of time were available to applicants, a response was filed on February 3, 2005 under the requirements of 37 CFR §1.8. A stamped postcard was received from the Office to evidence receipt. *See*, Appendix G. The response included an explanation of the situation, including the

fact that the notification of defective response was defective, and a written copy and computer-readable form of the sequence listing. *See*, Appendix G.

Well over a year later, on March 3, 2006, a notice of abandonment for failure to reply to the notification of missing requirements of February 28, 2002 was issued. *See*, Appendix H. Attached to the notification was a Raw Sequence Listing Error Report **dated January 18, 2006**. It is unclear which version of the sequence listing was used to generate this report or why a copy of the Raw Sequence Listing Error Report from the January 3, 2005 notification was never provided to the Applicants.

All replies have been filed within time periods set within the notifications. The Office **has not** alleged that the application has been abandoned based on an insufficiency of reply. *See*, MPEP §711.03(a). Applicants have made a good faith effort to timely and correctly respond to the notifications received from the Office despite the fact that the notifications were incomplete and/or inconsistent (*i.e.*, missing reports or stating that the disk was damaged and/or unreadable and providing a report from a clearly readable disk) and a request for clarification went unanswered.

The sequence listing submitted on June 24, 2002 was substantially and overwhelmingly correct in-substance. It appears that there was only an extraordinarily minor defect, which was the use of the phrase “N stands for any polynucleotide” instead of “N stands for any nucleotide” in SEQ ID NO:4 to describe one of 23 “X” nucleotides in the 507 nucleotide long sequence. This defect was not detectable by Checker, the Office’s validation software for sequence listings.

A corrected written copy and computer readable form of the sequence listing was submitted on March 16, 2006. It appears that this listing is error free and has been entered. Also submitted on March 16, 2006 was a petition to withdraw a holding of abandonment under 37 C.F.R. §1.181(a). On May 5, 2005 the Office issued a decision that denied the petition.

Applicants now petition for withdrawal of the holding of abandonment under 37 C.F.R. §1.181(a) or in the alternative 37 C.F.R. §1.183 or alternatively for revival of the abandoned application under 37 C.F.R. §1.137(b).

II. Request for Reconsideration of Petition for Withdrawal of Holding of Abandonment Under 37 C.F.R. §1.181(a)

Under 37 C.F.R. §1.135 (a) if an applicant of a patent application fails to reply within the time period provided under §1.136(a) an application will become abandoned **unless an Office action indicates otherwise**. Additionally, under §1.135(c) when reply by the applicant is a *bona fide* attempt to advance the application to final action, and is substantially a complete reply to the non-final Office action, but consideration of some matter or compliance with some requirement has been inadvertently omitted, applicant may be given a new time period for reply under §1.134 to supply the omission.

When the Office provided the January 3, 2005 notification of defective response, any abandonment of the application as of September 20, 2002 was precluded because, as the Office properly recognized, the applicant made a *bona fide* attempt to advance the application with a substantially complete reply. The Office was wholly within its discretion to **not abandon** the application and to provide the Applicants with another opportunity to correct a very minor error in a sequence listing. The Office cannot now withdraw their acceptance of Applicants' June 24, 2002 response because it was accepted within their discretion.

Unfortunately, the January 3, 2005 notification of defective response was defective itself, which denied the applicants of the opportunity to provide a corrected sequence listing. The notification stated that (1) the content of the computer readable form submitted on June 24, 2002 did not comply with the requirement of Annex C as indicated by the attached marked up copy of the "Raw Sequence Listing"; **and** (2) that the computer readable form was found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. However, no Raw Sequence Listing Error Report or Diskette Problem Report was attached to the notification. It was therefore unclear as to the Applicants if the computer readable form (1) did not comply with the sequence listing rules **OR** (2) was damaged and unreadable.

Applicants did indeed try to clarify the situation. On January 24, 2005 the undersigned requested the Raw Sequence Listing Error Report and/or Diskette Problem Report from Examiner Vonda Wallace via both phone and facsimile. *See*, Appendix F. No response was received from Examiner Wallace. Since extensions of time were **not** available to Applicants, a response was filed on February 3, 2005. The sequence listing still contained a very minor error

in SEQ ID NO:4, which was **not detectable** by Checker, the Office's validation software for Sequence Listings.

Since the January 3, 2005 notification of defective response was defective itself Applicants could not properly respond to the notification. The undersigned was unsure of whether there was an error in the sequence listing or if the disk was merely damaged. The Office did not respond to fax and phone requests for clarification. Therefore, Applicants filed a new sequence listing on February 3, 2005 with a (unknown to Applicants) very minor (and undetectable by Checker) error. Applicants have timely replied to every notification provided by the Office. The Office did not provide necessary information to the Applicants so that they could properly respond. Therefore, Applicants respectfully request that the holding of abandonment be withdrawn in this application.

III. Petition for Withdrawal of Holding of Abandonment Under 37 C.F.R. §1.183

If the Office concludes that the holding of abandonment will not be withdrawn under 37 C.F.R. §1.181(a), Applicants petition for withdrawal of abandonment, in the alternative, under 37 C.F.R. §1.183.

37 C.F.R. §1.183 provides that in an extraordinary situation, when justice requires, any requirement of the regulations in this part which is not a requirement of the statutes may be suspended or waived by the Director or the Director's designee, *sua sponte*, or on petition of the interested party, subject to such other requirements as may be imposed. Applicants authorize the Commissioner to charge our deposit account 13-2490 a petition fee (under § 1.17(f)) of four hundred dollars (\$400).

The sequence listing submitted on June 24, 2002 was substantially and overwhelmingly correct in-substance. It appears that there was only an extraordinarily minor defect, which was the use of the phrase "N stands for any polynucleotide" instead of "N stands for any nucleotide" in SEQ ID NO:4 to describe one of 23 "X" nucleotides in the 507 nucleotide long sequence. This defect was not detectable by Checker, the Office's validation software for sequence listings. Justice requires that the response filed in 2002 be accepted because, in view of the extremely minor nature of the error, the result of abandonment is draconian.

Additionally, any abandonment as the result of the response to the January 3, 2005 Notice of Defective response should be withdrawn. The January 3, 2005 notice was defective itself and the Office did not respond to the Applicants' request for clarification. (See Section II, above). Since the defect in the sequence listing was not detectable by Checker and the Office did not provide a Raw Sequence Listing Report, the sequence listing was re-submitted on February 3, 2005 with the very minor error in SEQ ID NO:4 as described above. It is unclear if a Raw Sequence Listing Error Report was ever generated since the Report finally issued to Applicants on March 3, 2006, was actually generated on January 18, 2006.

Justice requires that the holding of abandonment be withdrawn in this application because of an extraordinary situation relating to the submission of the sequence listing in this application:

- Applicant submitted all responses in a timely manner;
- The submitted sequence listing contained an exceedingly minor error, which was not detectable by Checker;
- The Office acted within its discretion by issuing a notice of defective response on January 3, 2005 (and the application was therefore not abandoned on September 28, 2002).

- The January 3, 2005 notice of defective response was defective and it is not clear that a Raw Sequence Listing Error Report was ever generated at this time by the Office;
- The Office did not respond to requests for clarification of the January 3, 2005 notice of defective response;
- The Office excessively delayed in issuing the notice of defective response of January 2, 2005 and the notice of abandonment of May 30, 2006, unfairly prejudicing the Applicants.

If the Applicants petition under 37 C.F.R. §1.181(a) is denied, Applicants respectfully request that the holding of abandonment be withdrawn in the interests of justice under 37 C.F.R. §1.183.

IV. Petition for Revival of Abandoned Application Under 37 C.F.R. §1.137(b)

If the Director does not grant the petitions under 37 C.F.R. §1.183 or under 37 C.F.R. §1.181(a), Applicants respectfully alternatively petition for the revival of the application under 37 C.F.R. §1.137(b) because the abandonment of the application was unintentional. The reply to the outstanding notice (the sequence listing) was previously filed on March 16, 2006. It appears that the sequence listing is error free and has been entered. The Commissioner is authorized to charge our deposit account seven hundred fifty dollars (\$750) for the petition fee under 37 C.F.R. §1.17(m). The entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant 37 C.F.R. §1.137(b) was unintentional.

Applicants dispute the alleged abandonment date of September 28, 2002. If any abandonment should apply¹, it should be a February 3, 2005 abandonment date, because the Office in its discretion issued a notice of defective response on January 3, 2005, which cannot now be rescinded.

Due to the fact that the date of abandonment of the application is under dispute at this time Applicants respectfully request a determination of the date of the abandonment of the application. Upon notification, Applicants will expeditiously submit a properly executed terminal disclaimer and fee as required under this section to the Office. The Office is invited to call the undersigned so that a Terminal Disclaimer can be signed and faxed to the Office.

Applicants respectfully request the revival of this application under 37 C.F.R. §1.137(b) if the first two petitions (see sections I and II of this paper) are denied.

¹ It is Applicants' position, however, that the application should not have been abandoned at all.

V. Conclusion

Applicants respectfully request that the holding of abandonment be withdrawn under 37 C.F.R. §1.181(a). If the Office denies this request, Applicants respectfully request that the holding of abandonment be withdrawn under 37 C.F.R. §1.183. If the Office denies this request, Applicants respectfully request that the application be revived under 37 C.F.R. §1.137(b).

Respectfully submitted,

Dated: _____

By: _____
Lisa M.W. Hillman, Ph.D.
Reg. No. 43,673
(217) 239-1962

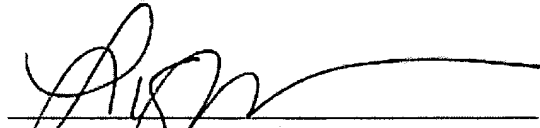
V. Conclusion

Applicants respectfully request that the holding of abandonment be withdrawn under 37 C.F.R. §1.181(a). If the Office denies this request, Applicants respectfully request that the holding of abandonment be withdrawn under 37 C.F.R. §1.183. If the Office denies this request, Applicants respectfully request that the application be revived under 37 C.F.R. §1.137(b).

Respectfully submitted,

Dated: 10-12-08

By:



Lisa M. W. Hillman, Ph.D.
Reg. No. 43,673
(217) 239-1962



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box 201
United States Patent and Trademark Office
Washington, D.C. 20231
www.uspto.gov

U.S. APPLICATION NUMBER NO. 09/980,845	FIRST NAMED APPLICANT Ann Progulske-Fox	ATTY. DOCKET NO. 00-505-B
INTERNATIONAL APPLICATION NO. PCT/US00/21340		
I.A. FILING DATE 08/04/2000		PRIORITY DATE 08/06/1999

Lisa M.W. Hillman
McDonnell Boehnen Hulbert & Berghoff
300 S Wacker Drive Suite 3200
Chicago, IL 60606

CONFIRMATION NO. 3701

371 FORMALITIES LETTER



OC000000007521267

Date Mailed: 02/28/2002

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated Office (37 CFR 1.494):

- U.S. Basic National Fees
- Indication of Small Entity Status
- Priority Document
- Biochemical Sequence Listing
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Request for Immediate Examination
- Small Entity Statement

DOCKETED

MAR 08 2002

DUE DATE: 4/28/02

BY: K.B. [Signature]

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTH FROM THE DATE OF THIS NOTICE OR BY 22 or 32 MONTHS (where 37 CFR 1.495 applies) FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).

- **APPLICANT MUST PROVIDE:**

- An initial or substitute computer readable form (CRF) of the "Sequence Listing."
- A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).

- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

VONDA M WALLACE

Telephone: (703) 305-3736

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/980,845	PCT/US00/21340	00-505-B

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/2130
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

TRANSMITTAL LETTER

Asst. Commissioner for Patents
Washington, D.C. 20231

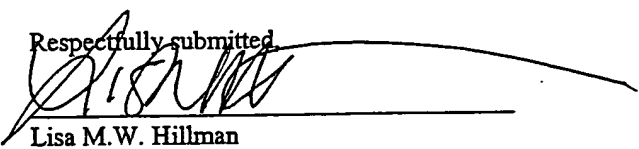
Dear Sir:

In regard to the above identified application,

1. We are transmitting herewith the attached:
 - a) Response to Notice to File Missing Parts;
 - b) Declaration and Power of Attorney;
 - c) Statement Under 37 C.F.R. § 1.821
 - d) Paper copy of Sequence Listing and Diskette copy;
 - e) Filing Fee Check;
 - f) Return postcard.
2. With respect to fees:
 - a) A check in the amount of \$65.00 is enclosed.
 - b) Please charge any underpayment or credit any overpayment our Deposit Account, No. 13-2490.
3. GENERAL AUTHORIZATION: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Asst. Commissioner for Patents, Washington, D.C. 20231 on March 27, 2002.

Date: March 27, 2002

Respectfully submitted,


Lisa M.W. Hillman
Registration No. 43,673

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/2130
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

RESPONSE TO NOTICE TO FILE MISSING PARTS

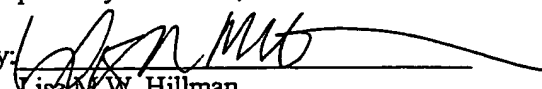
Box Missing Parts
Assistant Commissioner of Patents
Washington, D.C. 20231

Dear Sir:

The attached executed declaration is submitted in response to the Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office mailed on February 28, 2002, in the above-mentioned case. Also enclosed is a paper copy of the sequence listing, a diskette containing the sequence listing and Statement Under 37 C.F.R. §1.821. A check for sixty-five dollars (\$65) for an oath or declaration surcharge is enclosed. It is believed that no further fee is due to make this filing complete; however, if a fee or credit is due the Commissioner is authorized to charge or credit our Deposit Account No. 13-2490.

Respectfully submitted,

Date: 3/27/02

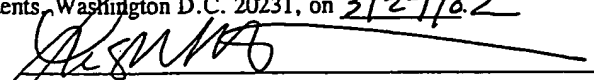
By: 
Lisa M.W. Hillman
Registration No.: 43,673

1

CERTIFICATE OF MAILING (37 C.F.R. 1.8a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner of Patents, Washington D.C. 20231, on 3/27/02

Date: 3/27/02


Lisa M.W. Hillman

DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Microbial Polynucleotides Expressed During Infection of a Host

the specification of which is attached hereto unless the following space is checked:

☒ was filed on November 15, 2001 as United States Application Serial Number 09/980,845.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s):

	<u>Number</u>	<u>Country</u>	<u>Day/Month/Year Filed</u>
1.	US00/21340	PCT	August 4, 2000
2.			

I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below:

	<u>Application Number</u>	<u>Filing Date</u>
1.	60/147,551	August 6, 1999
2.		

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

	<u>Application Number</u>	<u>Filing Date</u>	<u>Status: patented, pending, abandoned</u>
1.			
2.			

I hereby appoint the practitioners associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and I direct that all correspondence be addressed to that Customer Number.

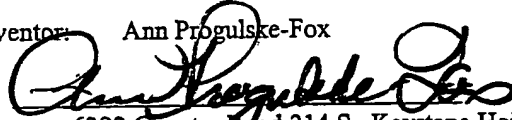
Customer Number: 020306

Principal attorney or agent: Lisa M.W. Hillman
Telephone number: 312-913-0001

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first inventor: Ann Progulski-Fox

Inventor's signature:



Date:

3/20/02

Residence:

6392 Country Road 214 S., Keystone Heights, Florida 32656

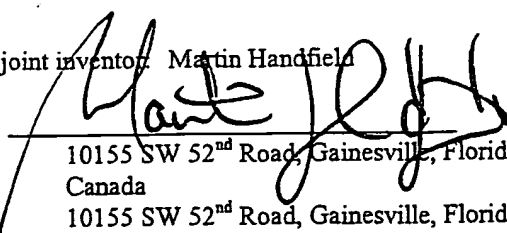
Citizenship:

United States of America

Post Office Address:

6392 Country Road 214 S., Keystone Heights, Florida 32656

Full name of second joint inventor: Martin Handfield

Inventor's signature: 

Date: 3/20/02

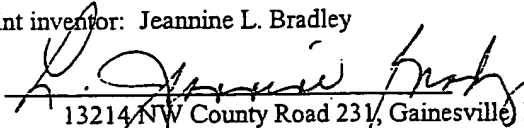
Residence: 10155 SW 52nd Road, Gainesville, Florida 32608

Citizenship: Canada

Post Office Address: 10155 SW 52nd Road, Gainesville, Florida 32608

Full name of third joint inventor: Jeannine L. Bradley

Inventor's signature:

 Date: 3/20/02

Residence:

13214 NW County Road 231, Gainesville, Florida 32609


Citizenship:

United States of America

Post Office Address:

13214 NW County Road 231, Gainesville, Florida 32609

Full name of fourth joint inventor: Jeffrey D. Hillman

Inventor's signature: 

Date: 3/11/02

Residence:

6424 SW 26th Place, Gainesville, Florida 32608

Citizenship:

United States of America

Post Office Address:

6424 SW 26th Place, Gainesville, Florida 32608

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/2130
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

STATEMENT UNDER 37 C.F.R. §1.821

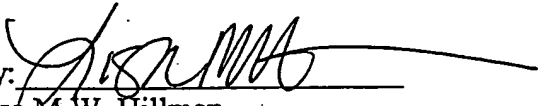
Honorable Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Enclosed is a written copy and a computer-readable copy of the sequence listing in the above mentioned case. The information recorded in computer readable form is identical to the written sequence listing. No new matter is added by the sequence listing.

Respectfully submitted,

Date: 3-27-02

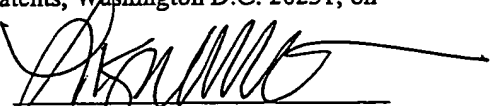
By: 
Lisa M. W. Hillman
Reg. No. 43,673

MCDONNELL, BOEHNEN,
HULBERT & BERGHOFF
300 South Wacker Drive
Chicago, IL 60606
(312) 913-0001

CERTIFICATE OF MAILING (37 C.F.R. 1.8a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner of Patents, Washington D.C. 20231, on 3-27-02.

Date: 3-27-02


Lisa M. W. Hillman

SEQUENCE LISTING

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Brady, Jeannine
Progulske-Fox, Ann
Hillman, Jeffrey D.

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a Host

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50 55 60

Gln Arg Asp Ile Leu Leu Thr Ala Pro Leu Ile Gly Glu Glu Asp Lys
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JCO5 Rec'd PCT/TO 08 APR 2002

Hon. Commissioner of
Patents and Trademarks

S/N 09/980,845

Atty LMWH

Re: Applicant - Progulsk-Fox, et al.

Case No. 00-505-B

Microbial Polynucleotides Expressed During Infection Of A Host

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of

- ☒ Transmittal Letter
- ☒ Signed Declaration
- ☒ Filing Fee Check
- ☒ Other Response to Notice to File Missing Parts; Statement Under 37 CFR § 1.821;

Diskette and paper copy of sequence listing

Fee Enclosed

\$ 65.00
March 27, 2002

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant





UNITED STATES PATENT AND TRADEMARK OFFICE

 Commissioner for Patents, Box PCT
 United States Patent and Trademark Office
 Washington, D.C. 20231
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/980,845	Ann Progulske-Fox	00-505-B

INTERNATIONAL APPLICATION NO.

PCT/US00/21340

I.A. FILING DATE	PRIORITY DATE
------------------	---------------

08/04/2000

08/06/1999

Lisa M.W. Hillman
 McDonnell Boehnen Hulbert & Berghoff
 300 S Wacker Drive Suite 3200
 Chicago, IL 60606

CONFIRMATION NO. 3701

371 FORMALITIES LETTER



OC00000008256428

Date Mailed: 06/12/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated Office (37 CFR 1.494):

- U.S. Basic National Fee
- Indication of Small Entity Status
- Priority Document
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Information Disclosure Statements
- Oath or Declaration
- Request for Immediate Examination
- Small Entity Statement

DOCKETED

JUN 20 2002
 2nd Ext. Missing Parts
 DUE DATE: 6/28/02
 BY: KOB CB

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - APPLICANT MUST PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
- For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

- A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
- The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

VONDA M WALLACE

Telephone: (703) 305-3736

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/980,845	PCT/US00/21340	00-505-B

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/2130
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

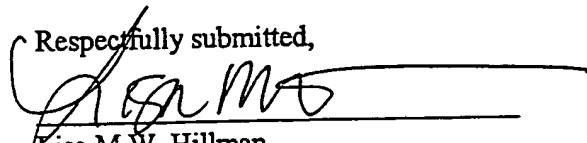
TRANSMITTAL LETTERAsst. Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

In regard to the above identified application,

1. We are transmitting herewith the attached:
 - a) Response to Notice of Defective Response;
 - b) Written copy of sequence listing;
 - c) Computer Readable copy of sequence listing; and
 - d) Return postcard
2. With respect to fees:
 - a) It is believed no fee is due at this time.
 - b) Please charge any underpayment or credit any overpayment our Deposit Account, No. 13-2490.
3. GENERAL AUTHORIZATION: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.
4. CERTIFICATE OF MAILING UNDER 37 CFR § 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Asst. Commissioner for Patents, Washington, D.C. 20231 on June 24, 2002.

Respectfully submitted,



Lisa M. W. Hillman

Registration No. 43,673

Date: June 24, 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/2130
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

RESPONSE TO NOTICE OF DEFECTIVE RESPONSE

Honorable Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

This paper is filed in response to the Notification of Defective Response mailed on June 12, 2002, in the above-mentioned case. It is believed that no fee is due in connection with this filing; however, if a fee is due please charge our deposit account number 13-2490.

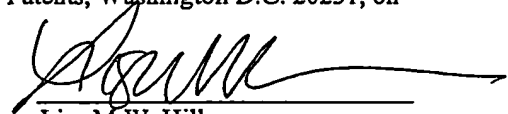
Enclosed is a written copy and a computer-readable copy of the sequence listing in the above mentioned case. The information recorded in computer readable form is identical to the written sequence listing. No new matter is added by the sequence listing. Applicants respectfully request that the specification of the application be amended by

CERTIFICATE OF MAILING (37 C.F.R. 1.8a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Assistant Commissioner of Patents, Washington D.C. 20231, on

6/24/02

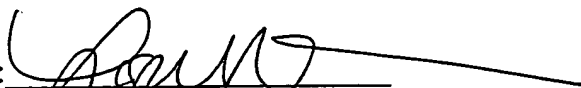
Date: 6/24/02


Lisa M. W. Hillman

deleting the previously filed sequence listing and the entry of the enclosed sequence listing.

Respectfully submitted,

Date: 6/24/02

By: 
Lisa M.W. Hillman
Reg. No. 43,673

MCDONNELL, BOEHNEN,
HULBERT & BERGHOFF
300 South Wacker Drive
Chicago, IL 60606
(312) 913-0001

SEQUENCE LISTING

<110> Handfield, Martin
 Brady, Jeannine
 Progulske-Fox, Ann
 Hillman, Jeffrey D.

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 a Host

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nngcnaggng cancagctta cctttgccga cggttcnctg tntgaaagcg ccattcgcaa 120
agtgccgggtg gaggcggnga aaattcactc acttggtgcg gaaggcaatg atgtgggatt 180
gaaagcccat catggcgggt ggataaagcg ttatttttta tgcggcaga tgcctttcct 240
gcgttaaatg cgttattaga cgaaaatttt tcgtatcagg acacagcagt ttacggcgag 300
aatattgtgg tttccgcgct gaatgaagat tccgtgtgtg tgggcgatat ttatcaaata 360
ggctcctgcg tgggtggagg gtcgcagccg cgtaaaccct gtgagcgctt atcgaaaaat 420
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cgggtgtacc ccaaggggga aattcaa 507
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<213> Actinobacillus actinomycetemcomitans

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ctgaacggtt cgcacagttg gtttgtggcg gacgcacggg aagatttgac gcaactgcaa 180
caacgcttgg cacaacggga tattttgctt accgcaccgc ttatcggcga agaggacaaa 240
agtgcggtgg attttgagaa tgaaattttt gtcgcgcacc aagccttggt ccatttgatg 300
cggcaagaac gcgtgaaagc cgcccgccgt ccgattttta tgcaggcgca acagtttcaa 360
tggcaatttg aaccgaacgg tttgcgcctt aaattttatt tgccggcagg cagttacgcc 420
acggcggttg tacgcgagct ggtgaatggt gaaaactgaa aaacgagaag aaaaacagga 480
ataacaagaa catgaatatt ttattaagta acgatgacgg cattcacgcg ccgggcattc 540
gtgtgatggc agaacattgc gtaagattgc caatgtgacc atcgtcgcgc cggacagcaa 600
ccgcaagcgc cgccttcagt tncctaacct tggatgaagc gntgtattcc gttcatttgg 660
naaagcggng attattgcgt caacngcacn cccggcggan tgcgtgcata ttgccctgac 720
gggttttctt tccgggcgca tcgatttggt gatttccggc atcaacgccg gggcgaacct 780
gggcgatgat gtgctatatt ccggcacggg cgcggcagca tttgaagggc gtcattctgg 840
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tattaacgtg ccgatgtgct cttacgaaga actgaaaggc attaaagtgt gccatttggg 1020
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 aatattcgca aaaaagattt ggaaacgcca acgccttata acacctatgt gattgacggc 240
 ttgccgccga caccgattgc gatgccgagt gaagaggcgt tacaggcggg ggcacatccg 300
 gcgcaaaccg cgttttatta tttcgtggca gacggcacgg ggggacacaa attcagtcgt 360
 aattttaacg aacataacaa agcgggtgcag caatatttgc gctggtaccg cgaacaaaac 420
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 caccgctcat caatgcgttg tggatacgtt aaaaacgtta ggtgttgggg aagtcattctc 540
 taccgcgag ccgggcggca caccggttg cggaagagct acgccatctc attaaacatg 600
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 tagcaagccc cgccagttgg ctgtataaca acgcaaaaat gaatccgcac agaatcggaa 180
 atgtcgggct gatgtaacgc gtcggcaagg caaattgcag tagacgcgcc aaggtaaaac 240
 ccagcatcat cgccagtcgg atatgcagcc ctgaaatggc aattaaatgc gccgtatttg 300
 ttttttgata aatttgccaa gttttttggt ctaagcggaa acgttcgcca aaaccgagt 360
 ccagcaacaa gccttgctcg ggtaaattct ccgtttgttg taaggcttga ttgagagcgg 420
 tttggcgtaa cgaaaaaacg ttttccaatt tgaccgcact tttaatctct gcccaagcgg 480
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 aaagcgctcg caagcgtaaa ttgcctgcgt aacgttcgcc cgggggttgac tggttgcttg 600
 agtttccatt gcgcgtaaat acgttggtcn gggaagattt tcggcggaagt tttggcgccg 660
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 gttagagaaa ccttgaatca cattgccgtt ggctcgccag cgccatgcca cgttggatac 180
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 catttgcggt gcagctttcg tttgcaccgt aaccgttggt ccgcggctca cctttaagg 420
 ttgtccgacg cttaagctgt aaggttcgga catattatc aacgcgcgca attctttcac 480
 atccaaacca gaaatgtagg cgataaggaa catggtgtca cctttgcgta cggtatangt 540

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ggttgaaccg tccaccggtt gcatgagtc cggggataag gtaccgtcgg cgttttccac 900
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aaaagaaaaa tacaacttag acgtagaata cgttttattc atgactacgc cttgccaaac 180
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gcgcttattt aagctaaaac accatcttgg cattcaggga tttttatccg ggctattcac 180
ttttgtctcg cgttccgggtg ccagattatt gccgacatca ttactgaaaa acatctatca 240
aaccttttta agaaaataa 259

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ctgaacgggt cgcacagttg gtttgtggcg gacgcacgg aagatttgac gcaactgcaa 180
caacgcttgg cacaacggga tattttgctt accgcaccgc ttatcggcga agaggacaaa 240
agtgcggttg attttgagaa tgaaattttt gtcgcgcacc aagccttggt ccatttgatg 300
cggcaagaac gcgtgaaagc cgcccgccgt ccgattttta tgcaggcgca acagtttcaa 360
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 gccttcagtt ncttaacctt ggtgaagccg ntgtattccg ttcatttggg aaagcggnga 180
 ttattgcgtc aacngcacnc cgggcggant gcgtgcata tgccttgacg ggttttcttt 240
 ccgggcgcac cgatttggtg atttcgggca tcaacgcggg ggcgaacctg ggcgatgatg 300
 ttgctatattc cggcacggtc gcggcagcat ttgaaggcg tcatctgggc ttgccgtcta 360
 ttgcggtatc gtcgatggg cgtcaacatt ttgaaacggc ggcgcgcgtg gtatgcgatt 420
 tgggtgccgaa attacacgcc caattattag gcaaacacga aattctgaat attaacgtgc 480
 ccgatgtgcc ttacgaagaa ctgaaaggca ttaaagtgtg ccatttgggc taccgttctt 540
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 aaaatgaagc tgcaaaccga tccgaccgtc atttacggca tgggcgacga ctacaacggc 180
 aatattcgca aaaaagattt ggaaacgcca acgccttata acacctatgt gattgacggc 240

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          20             25             30
Ala Glu Ile Ala Ala Lys Val Ala Lys Glu Lys Tyr Asn Leu Asp Val
          35             40             45
Glu Tyr Val Leu Phe Met Thr Thr Pro Cys Gln Thr Leu Gln Cys Leu
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Lys Val Ile
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          20             25             30
Leu Asn Gln Ala Lys Ala Glu Trp Arg Leu Phe Lys Leu Lys His His
          35             40             45
Leu Gly Ile Gln Gly Phe Leu Ser Gly Leu Phe Thr Phe Val Leu Arg
          50             55             60

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Thr Phe Leu Arg Lys
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<210> 17
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20 25 30
Val Leu Asn Gly Asp Val Leu Gln Leu Asn Gly Ser His Ser Trp Phe
35 40 45
Val Ala Asp Ala Ser Glu Asp Leu Thr Gln Leu Gln Gln Arg Leu Ala
50 55 60
Gln Arg Asp Ile Leu Leu Thr Ala Pro Leu Ile Gly Glu Glu Asp Lys
65 70 75 80
Ser Ala Val Asp Phe Glu Asn Glu Ile Phe Val Ala His Gln Ala Leu
85 90 95
Phe His Leu Met Arg Gln Glu Arg Val Lys Ala Ala Arg Arg Pro Ile
100 105 110
Leu Met Gln Ala Gln Gln Phe Gln Trp Gln Phe Glu Pro Asn Gly Leu
115 120 125
Arg Leu Lys Phe Tyr Leu Pro Ala Gly Ser Tyr Ala Thr Ala Leu Val
130 135 140
Arg Glu Leu Val Asn Val Glu Asn
145 150

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			20					25					30		

Pro	Asp	Ser	Asn	Arg	Lys	Arg	Arg	Leu	Gln	Xaa	Leu	Asn	Leu	Gly	Glu
		35				40						45			

Ala	Xaa	Val	Phe	Arg	Ser	Phe	Gly	Lys	Ala	Xaa	Ile	Ile	Ala	Ser	Thr
	50					55					60				

Ala	Xaa	Pro	Ala	Xaa	Cys	Val	His	Ile	Ala	Leu	Thr	Gly	Phe	Leu	Ser
65					70					75				80	

Gly	Arg	Ile	Asp	Leu	Val	Ile	Ser	Gly	Ile	Asn	Ala	Gly	Ala	Asn	Leu
				85					90					95	

Gly	Asp	Asp	Val	Leu	Tyr	Ser	Gly	Thr	Val	Ala	Ala	Ala	Phe	Glu	Gly
			100					105					110		

Arg	His	Leu	Gly	Leu	Pro	Ser	Ile	Ala	Val	Ser	Leu	Asp	Gly	Arg	Gln
		115					120					125			

His	Phe	Glu	Thr	Ala	Ala	Arg	Val	Val	Cys	Asp	Leu	Val	Pro	Lys	Leu
	130					135					140				

His	Ala	Gln	Leu	Leu	Gly	Lys	His	Glu	Ile	Leu	Asn	Ile	Asn	Val	Pro
145				150						155				160	

Asp	Val	Pro	Tyr	Glu	Glu	Leu	Lys	Gly	Ile	Lys	Val	Cys	His	Leu	Gly
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Tyr	Arg	Ser	Ser	Ala	Ser	Glu	Val	Ile	Lys	Gln	Gln	Ser	Pro	Arg	Gly
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 35 40 45
 Thr Val Ile Tyr Gly Met Gly Asp Asp Tyr Asn Gly Asn Ile Arg Lys
 50 55 60
 Lys Asp Leu Glu Thr Pro Thr Pro Tyr Asn Thr Tyr Val Ile Asp Gly
 65 70 75 80
 Leu Pro Pro Thr Pro Ile Ala Met Pro Ser Glu Glu Ala Leu Gln Ala
 85 90 95
 Val Ala His Pro Ala Gln Thr Ala Phe Tyr Tyr Phe Val Ala Asp Gly
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 20 25 30
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 35 40 45
 Lys Ala Thr Pro Ser His
 50

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Hon. Commissioner of
Patents and Trademarks

S/N 09/980,845

Atty LMWH

Re: Applicant - Progulsk-Fox

Case No. 00-505-B

Microbial Polynucleotides Expressed During Infection Of A Host

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter
- ☒ Other Response to Notice of Defective Response: Sequence listing (computer readable copy and written copy)

Fee Enclosed

\$ -0-

June 24, 2002

Respectfully,
McDonnell Boehnen Hubert & Berghoff
Attorney for Applicant

Hon. Commissioner of
Patents and Trademarks

S/N 09/980,845

Atty LMWH

Re: Applicant - Proguliske-Fox

Case No. 00-505-B

Microbial Polynucleotides Expressed During Infection Of A Host

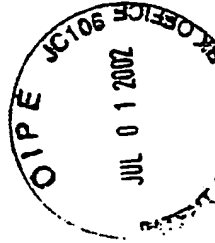
525 Rec'd PC 01 JUL 2002

Sir: Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter
☒ Other Response to Notice of Defective Response: Sequence listing (computer readable copy and written copy)

Fee Enclosed

\$ -0-
June 24, 2002



Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant



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U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/980,845	Ann Progulske-Fox	00-505-B

INTERNATIONAL APPLICATION NO.
PCT/US00/21340

I.A. FILING DATE	PRIORITY DATE
08/04/2000	08/06/1999

Lisa M.W. Hillman
 McDonnell Boehnen Hulbert & Berghoff
 300 S Wacker Drive Suite 3200
 Chicago, IL 60606

CONFIRMATION NO. 3701

371 FORMALITIES LETTER



OC00000008256428

Date Mailed: 01/03/2005

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495)

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 11/15/2001
- Copy of the International Search Report filed on 11/15/2001
- Copy of IPE Report filed on 04/08/2002
- Information Disclosure Statements filed on 04/08/2002
- Biochemical Sequence Diskette filed on 04/08/2002
- Oath or Declaration filed on 04/08/2002
- Biochemical Sequence Listing filed on 04/08/2002
- Small Entity Statement filed on 11/15/2001
- Request for Immediate Examination filed on 11/15/2001
- Copy of references cited in ISR filed on 11/15/2001
- U.S. Basic National Fees filed on 11/15/2001

DOCKETED

JAN 07 2005
 DUE DATE 2-3-05
 BY [Signature]

Applicant's response filed 04/08/2002 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 02/28/2002 have not been completed.

- ✓ Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of Annex C of the Administrative Instructions and 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - APPLICANT MUST PROVIDE:
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

VONDA M WALLACE

Telephone: (703) 305-3736

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/980,845	PCT/US00/21340	00-505-B



McDonnell Boehnen Hulbert & Berghoff
Law Offices

URGENT

Fax transmittal

To Examiner Vonda M. Wallace
Company USPTO
Fax 703 746 6711
Phone
Pages, with cover 1
Re

Date January 24, 2005
From Lisa M.W. Hillman, Ph.D
Direct 312 935 2371
Email hillman@mbhb.com
CAM 665/ 6

Dear Examiner Wallace:

This paper is filed in response to the notice of defective response issued in the above-mentioned application on January 3, 2005. The notice states that the content of the computer readable form of the sequence listing does not comply with the sequence listing requirements and states that a marked-up copy of the raw sequence listing is attached to the notice. However, the marked-up copy of the raw sequence listing was not attached to the raw sequence listing. Applicants respectfully request that a copy of the marked-up sequence listing be sent to the undersigned at the Office's earliest convenience.

Thank you.



Lisa M.W. Hillman, Ph.D

300 South Wacker Drive 312 913 0001 phone
Chicago, Illinois 60606-6709 312 913 0002 fax
www.mbhb.com

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312 913 0001 if all pages
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delivery only to the person listed
above. It may contain confidential
or privileged information, the
disclosure of which is prohibited.



McDonnell Boehnen Hulbert & Berghoff
Law Offices

URGENT

Fax transmittal

To Examiner Vonda M. Wallace
Company USPTO
Fax 703 746 6711
Phone
Pages, with cover
Re

Date January 24, 2005
From Lisa M.W. Hillman, Ph.D
Direct 312 935 2371
Email hillman@mbhb.com
C/M 665/ 6

Dear Examiner Wallace:

This paper is filed in response to the notice of defective response issued in the above-mentioned application on January 3, 2005. The notice states that the content of the computer readable form of the sequence listing does not comply with the sequence listing requirements and states that a marked-up copy of the raw sequence listing is attached to the notice. However, the marked-up copy of the raw sequence listing was not attached to the raw sequence listing. Applicants respectfully request that a copy of the marked-up sequence listing be sent to the undersigned at the Office's earliest convenience.

Thank you.


Lisa M.W. Hillman, Ph.D

300 South Wacker Drive Chicago, Illinois 60606-6709
www.mbhb.com 312 913 0001 phone 312 913 0002 fax

Please notify receptionist at 312 913 0001 if all pages are not received. If you received this fax in error, please notify us immediately by phone (collect) to arrange for return of the document.

This transmittal is strictly for delivery only to the person listed above. It may contain confidential or privileged information, the disclosure of which is prohibited.

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: JAN-24 12:58

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: 369

Time : JAN-24-05 12:59
Fax number : +3129130002
Name : MCDONNELL BOEHNEN HULBERT & BERGHOFF

CONFIRMATION REPORT - MEMORY SEND

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 00-505-B)

In re Application of:

Progulske-Fox

Serial No.: 09/980,845

Filed: August 4, 2000

For: Microbial Polynucleotides Expressed
During Infection of a Host

Examiner: To Be Assigned

Group Art Unit: To Be Assigned

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

1. We are transmitting herewith the attached papers for the above-identified patent application:

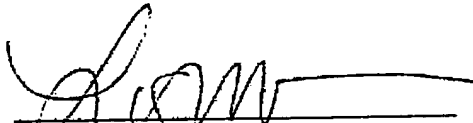
- ☒ Transmittal letter (in duplicate);
- ☒ Response to Notice of Defective Response;
- ☒ Copy of Notification of Defective Response;
- ☒ Paper copy of sequence listing;
- ☒ Diskette of sequence listing;
- ☒ Return Receipt Postcard

2. **GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES:** Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.

3. **CERTIFICATE OF MAILING UNDER 37 CFR §1.8:** The undersigned hereby certifies that this Transmittal Letter and the paper described in paragraph 1, are being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 3, 2005.

Dated: February 3, 2005

By:


Lisa M.W. Hillman, Ph.D
Reg. No. 43,673

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
	)	Group Art Unit: TBA
Progulske-Fox)	
	)	Examiner: TBA
Serial No. 09/980,845)	
	)	Atty. Dckt. No.: 00-505-B
International Filing Date: Aug. 4, 2000)	
	)	Intl. Appl. No.: PCT/US00/21340
Priority Date: Aug. 6, 1999)	

For: MICROBIAL POLYNUCLEOTIDES EXPRESSED DURING INFECTION OF A HOST

RESPONSE TO NOTICE OF DEFECTIVE RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

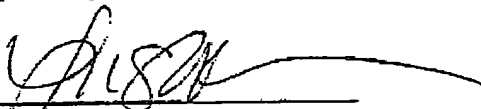
This paper is filed in response to the Notification of Defective Response mailed on January 3, 2005, in the above-mentioned case. It is believed that no fee is due in connection with this filing; however, if a fee is due please charge our deposit account number 13-2490.

The Notification of Defective Response stated that the computer readable copy was unreadable and also stated that errors found in the sequence listing were attached to the Notice. However, there was no attachment to the Notice. Applicants requested the attachment from Examiner Vonda Wallace on January 24, 2005 via phone and facsimile. However, the attachment to the Notice has not been received by Applicants. Applicants respectfully request that any errors in the sequence listing be brought to their attention at the Office's earliest convenience.

Enclosed is a written copy and a computer-readable copy of the sequence listing in the above mentioned case. The information recorded in computer readable form is identical to the written sequence listing. No new matter is added by the sequence listing. Applicants respectfully request that the specification of the application be amended by deleting the previously filed sequence listing and the entry of the enclosed sequence listing.

Respectfully submitted,

Date: 2/3/05

By: 
Lisa M.W. Hillman
Reg. No. 43,673

MCDONNELL, BOEHNEN,
HULBERT & BERGHOFF
300 South Wacker Drive
Chicago, IL 60606
(312) 913-0001

SEQUENCE LISTING

<110> Handfield, Martin
Brady, Jeannine
Progulske-Fox, Ann
Hillman, Jeffrey D.

<120> Microbial Polynucleotides Expressed During Infection of
a Host

<130> MBHB00-505B

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<150> 60/147,551
<151> 1999-08-06

<150> PCT/US00/21340
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gcgttaaagt	cgttattaga	cgaaaatttt	tcgatcagg	acacagcagt	ttacggcgag	300
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 catttgcggt gcagctttcg tttgcaccgt aaccggttg cgcgggtca cctttaaggt 420
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Gln Arg Asp Ile Leu Leu Thr Ala Pro Leu Ile Gly Glu Glu Asp Lys
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Ser Ala Val Asp Phe Glu Asn Glu Ile Phe Val Ala His Gln Ala Leu
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Phe His Leu Met Arg Gln Glu Arg Val Lys Ala Ala Arg Arg Pro Ile
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His	Ala	Gln	Leu	Leu	Gly	Lys	His	Glu	Ile	Leu	Asn	Ile	Asn	Val	Pro
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50 55 60
Lys Asp Leu Glu Thr Pro Thr Pro Tyr Asn Thr Tyr Val Ile Asp Gly
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35 40 45
Lys Ala Thr Pro Ser His
50



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UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/980,845	Ann Progulske-Fox	00-505-B
INTERNATIONAL APPLICATION NO.		
PCT/US00/21340		
LA. FILING DATE	PRIORITY DATE	
08/04/2000	08/06/1999	

Lisa M.W. Hillman
 McDonnell Boehnen Hulbert & Berghoff
 300 S Wacker Drive Suite 3200
 Chicago, IL 60606

CONFIRMATION NO. 3701

371 FORMALITIES LETTER



OC000000008256428

Date Mailed: 01/03/2005

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495)

- Indication of Small Entity Status
- Priority Document
- Copy of the International Application filed on 11/15/2001
- Copy of the International Search Report filed on 11/15/2001
- Copy of IPE Report filed on 04/08/2002
- Information Disclosure Statements filed on 04/08/2002
- Biochemical Sequence Diskette filed on 04/08/2002
- Oath or Declaration filed on 04/08/2002
- Biochemical Sequence Listing filed on 04/08/2002
- Small Entity Statement filed on 11/15/2001
- Request for Immediate Examination filed on 11/15/2001
- Copy of references cited in ISR filed on 11/15/2001
- U.S. Basic National Fees filed on 11/15/2001

DOCKETED

JAN 07 2005
 DUE DATE 2-3-05
 BY [Signature]

Applicant's response filed 04/08/2002 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 02/28/2002 have not been completed.

✓ Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of Annex C of the Administrative Instructions and 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
 - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
 - **APPLICANT MUST PROVIDE:**
 - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase PatentIn Software, call (703) 306-2600
 - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

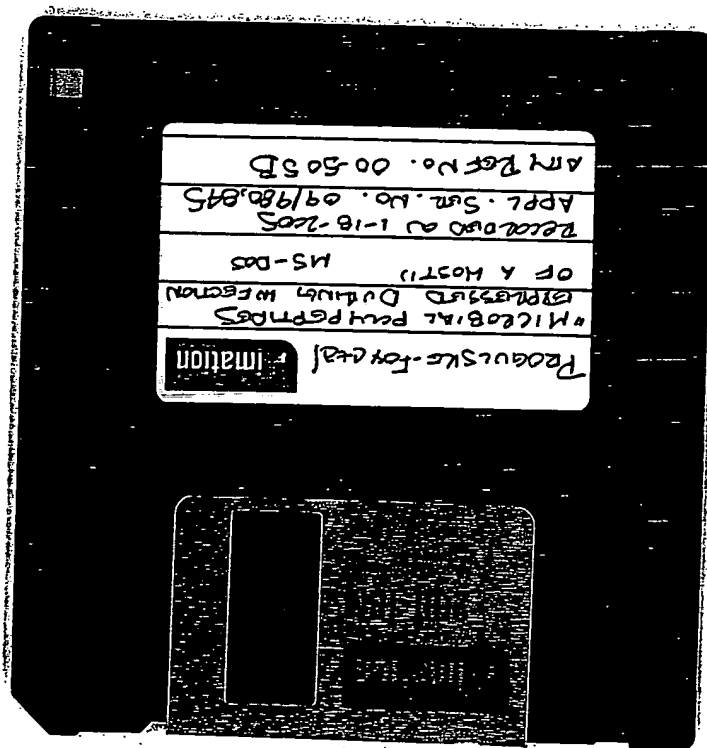
VONDA M WALLACE

Telephone: (703) 305-3736

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/980,845	PCT/US00/21340	00-505-B

BEST AVAILABLE COPY



Hon. Commissioner of
Patents and Trademarks

SN 09/980,845

Atty LMWH/amp

Re: Applicant Proguiske-Fox

Case No.: 00-505-B

Sir:

Microbial Polynucleotides Expressed During Infection of a Host

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter (with Duplicate)
- ☒ Response to Notice of Defective Response
- ☒ Copy of Notification of Defective Response
- ☒ Paper and disk copy of correct sequence listing
- ☒ Return Receipt Postcard

Fee Enclosed

\$0.00

February 3, 2005

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant

Hon. Commissioner of
Patents and Trademarks

SN 09/980,845

Atty LMWH/tmp

Re: Applicant ProguiskeFox

Case No.: 00-505-B

Microbial Polynucleotides Expressed During Infection of a Host

Sir:

Please place the Patent Office receipt stamp hereon and mail to acknowledge receipt of:

- ☒ Transmittal Letter (with Duplicate)
- ☒ Response to Notice of Defective Response
- ☒ Copy of Notification of Defective Response
- ☒ Paper and disk copy of correct sequence listing
- ☒ Return Receipt Postcard



Fee Enclosed

\$0.00

February 3, 2005

Respectfully,
McDonnell Boehnen Hulbert & Berghoff
Attorney for Applicant



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER FOR PATENTS
PO Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
09/950,845	Ann Progulsko-Fox	00-505-B

INTERNATIONAL APPLICATION NO.

PCT/US00/21340

IA FILING DATE	PRIORITY DATE
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08/04/2000

08/06/1999

Lisa M.W. Hillman
McDonnell Boehnen Hulbert & Berghoff
300 S Wacker Drive Suite 3200
Chicago, IL 60606

CONFIRMATION NO. 3701

371
ABANDONMENT/TERMINATION
LETTER



0000000018184385

Date Mailed: 03/03/2006

NOTIFICATION OF ABANDONMENT

The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

- Applicant has failed to respond to the notification of MISSING REQUIREMENTS (Form PCT/DO/EO/905), mailed 02/28/2002 within the time period set therein.

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495, and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

VONDA M WALLACE

Telephone: (703) 308-9140 EXT 225

PART 3 - OFFICE COPY

FORM PCT/DO/EO/909 (371 Abandonment Notice)

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/980,845A
Source: IFWP
Date Processed by STIC: 1/18/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chknote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



IPW2

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,845A

DATE: 01/18/2006

TIME: 15:36:00

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Output Set: N:\CRF4\01182006\I980845A.raw

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4 Brady, Jeannine
5 Progulski-Fox, Ann
6 Hillman, Jeffrey D.
8 <120> TITLE OF INVENTION: Microbial Polynucleotides Expressed During Infection of
9 a Host
11 <130> FILE REFERENCE: MBHBC0-505B
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/980,845A
C--> 14 <141> CURRENT FILING DATE: 2001-11-15
16 <150> PRIOR APPLICATION NUMBER: 60/147,551
17 <151> PRIOR FILING DATE: 1999-08-06
19 <150> PRIOR APPLICATION NUMBER: PCT/US00/21340
20 <151> PRIOR FILING DATE: 2000-08-04
22 <160> NUMBER OF SEQ ID NOS: 20
24 <170> SOFTWARE: PatentIn Ver. 2.1
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 849
28 <212> TYPE: DNA
29 <213> ORGANISM: Actinobacillus actinomycetemcomitans
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Does Not Comply
Corrected Diskette Needed

P.4

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,845A

DATE: 01/18/2006

TIME: 15:36:00

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90 tataagacaa gccacgtca atcagggttt gcaatttac cgcaatcatt ggaatggcat 240
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92 tgtagcggat ttccagggt tcgcgattgt aacgcttgcc ttacattgg tcgcaaggca 360
93 cgtacacatc gggcaggaa tgcatctca ctttgattac gccgtcgccc tggcaggctt 420
94 acagcgcccg ccgcgcacgt taaaactgaa acgccccggg ttataaccgc gcgcacgggc 480
95 ttccggtacg ccggcaaacw attcgcgaat cggcgtgaat acgcccgtgt aagttgcccg 540
W--> 96 gttggagcgt ggcgtgcgtc caatengget ttggttsata tcaatacttt atcgaaaaat 600
97 tccaaaacct taatggactt gtacngngaa acctcngcat ttctgcacn attaanccgt 660
98 ttgtgtcaat anggaacaaa ntgtcgtaa tcagtgtaga atttaccta accggacacn 720
99 ccngtgatgc aggtaaatan gccacggga atgtctaat tgacgttttt caggttgta 780
100 ccggaagcgc cgaacaattt gacgattttt tcttatcaa gtgoggtacg ttttttcggt 840
101 atttcgac 849
104 <210> SEQ ID NO: 2
105 <211> LENGTH: 357
106 <212> TYPE: DNA
107 <213> ORGANISM: Actinobacillus actinomycetemcomitans
109 <400> SEQUENCE: 2
110 gatcactaag ttgttcaatc ctttcgcttg ggaatctttg tctaaatacg gtttatgttg 60
111 cattgcgtta acgtctaat cacttttaga cactgcagt ttggcaagg cgtagtcagt 120
112 aataaaacgt attctacgtc taagttgtat tttcttttg ccaatttcgc tgcgatttca 180
113 gccacttggg gttccggtcc tgcctacag cccactttga ttgttgccgg ggccttctgc 240
114 gccggtttgt ctgcgggtgc ggttccggc tttttctct cattacaagc ccgttaaggc 300
115 gaatacggag gctaattgtg cgacgcctaa taattttttt caagttcata aaagatc 357
118 <210> SEQ ID NO: 3
119 <211> LENGTH: 886
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RAW SEQUENCE LISTING DATE: 01/18/2006
PATENT APPLICATION: US/09/980,845A TIME: 15:36:00

Input Set : A:\seqlistcorrected.2002.06.11.txt
Output Set: N:\CRF4\01182006\I980845A.raw

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61 <230> FEATURE:
62 <221> NAME/KEY: misc_feature
63 <222> LOCATION: (661)
64 <223> OTHER INFORMATION: N stands for any nucleotide.
66 <230> FEATURE:
67 <221> NAME/KEY: misc_feature
68 <222> LOCATION: (672)
69 <223> OTHER INFORMATION: N stands for any nucleotide.
71 <230> FEATURE:
72 <221> NAME/KEY: misc_feature
73 <222> LOCATION: (681)
74 <223> OTHER INFORMATION: N stands for any nucleotide.
76 <230> FEATURE:
77 <221> NAME/KEY: misc_feature
78 <222> LOCATION: (720)
79 <223> OTHER INFORMATION: N stands for any nucleotide.
81 <230> FEATURE:
82 <221> NAME/KEY: misc_feature
83 <222> LOCATION: (723)
84 <223> OTHER INFORMATION: N stands for any nucleotide.
86 <400> SEQUENCE: 1
87 gatcgcgtaa acggtgtaac acggaaagca attgtttaat gtcggcaaaa tgcagccctg 60
88 cggtcgggttc gtccagaata tacaggggtt tgcccggtac cggtttgag agttccgtcg 120
89 ccagtttcac cggttgeget tcccgccgg acaggggtgt agaggattgc cccaagcgaa 180
90 tatagacaa gccacgtca atcagggttt gcaatttac cgcattcatt ggaatggcat 240
91 cgaataaact gcgcgcatt tccaccgtca tgtccagcac ctgatgaatg gttttacctt 300
92 tgtageggat ttccagggtt tcgcgattgt aacgcttgcc ttacattgg tcgcaaggca 360
93 cgtacacatc gggcaggaa tgcatttcca ctttgattac gccgtcgccc tggcaggctt 420
94 acagcgcccg ccgcgcacgt taaaactgaa acgccccggg ttataaccgc gcgcacgggc 480
95 ttccggtagc ccggcaataa attcgcgaat cggcgtagat acgcccgtgt aagttgcccg 540
W--> 96 gttggagcgt ggcgtgcgtc caatcggct ttggtaata tcaatacttt atcgaaaaat 600
97 tccaaacctt taatggactt gtacngngaa acctcngcat tttctgcacn attaanccgt 660
98 nttgtgcaat anggaacaaa ntgtcgtaa tcagttaga atttacotta accggacacn 720
99 cngtgcagc aggtaaataa gccacgggga atgtctaaat tgacgttttt caggttgtta 780
100 ccggaagcgc cgaacaattt gagcattttt ttcttarcaa gtgcggtacg tttttcgggt 840
101 atttcgac 849
104 <210> SEQ ID NO: 2
105 <211> LENGTH: 357
106 <212> TYPE: DNA
107 <213> ORGANISM: Actinobacillus actinomycetemcomitans
109 <400> SEQUENCE: 2
110 gatcactaag ttgtcaatc ctttcgcttg ggaatctttg tctaaatacg gtttatgttg 60
111 cattgcgtta acgtctaaat cactcttaga cactgcagtg ttggcaagg cgtagtcattg 120
112 aataaaacgt attotacgtc taagtgtat tttcttttg cacttttcgc tgcgatttca 180
113 gccacttggt gttccgggtc tgccatcac cccactttga ttgttgccgg ggcttctgcc 240
114 gccggttgt ctgccgtgc ggttcgggt ttttctctt cattacaagc ccgttaaggc 300
115 gaatacggag gctaatgttg cgaacgctaa taatttttt caagttcata aaagatc 357
118 <210> SEQ ID NO: 3
119 <211> LENGTH: 886
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RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/09/980,845A

TIME: 15:36:00

Input Set : A:\seqlistcorrected.2002.05.21.txt

Output Set: N:\CRF4\01182006\I980845A.raw

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120 <212> TYPE: DNA
121 <213> ORGANISM: Actinobacillus actinomycetemcomitans
123 <220> FEATURE:
124 <221> NAME/KEY: misc_feature
125 <222> LOCATION: (554)
126 <223> OTHER INFORMATION: N stands for any nucleotide.
128 <220> FEATURE:
129 <221> NAME/KEY: misc_feature
130 <222> LOCATION: (596)
131 <223> OTHER INFORMATION: N stands for any nucleotide.
133 <400> SEQUENCE: 3
134 gatcaaaactg gtggcgcaag ggcagcgcggt agcaaaattta cccgatattt tggctctatgc 60
135 gcgcgtcgcc aacggcatgg tagggcgacg ccgtgggtta aaccaagcca aagcgggaatg 120
136 gcgcgttattt aagctaaaaac accatcttgg cattcaggga tttttatccg ggcatttcac 180
137 ttttgcctcg cggtccggtg ccagattatt gcgcacatca ttactgaaaa acatctatca 240
138 aaccttttta agaaaaatac atgatgaaat taactgtgat tttaaaaata tccggaattt 300
139 ccaccgcact ttttctagcg ggttggtcct caaattcaag tgcgcgcagc caatcctctg 360
140 agcaggcgaa ttctgttacg gctgtgaatc ccactgcggg gtacagtaag ccccgcaatt 420
141 tggataactt caacgattat gtgaatttct taagggttaa agcagcgcca gaaggcggtt 480
142 ctgcgcagct attgaatgca caaataata ttaattatat tcaaaaatcc gtggatttgg 540
W--> 143 acgatcaaca agcnggcaga attcgcaagc gtgatecaaa tgccccgcgc atcatnaatt 600
144 ccgaacggca cgaccaatta cttsaatcgt gtattaacca agaataaagt agacacggca 660
145 gaagcacgtt attgggaaca attgcgcagc cttgaaaatg cttcaaaaga attcagcgta 720
146 ccgaaaaatt atctgttagc cttgtggggc atggagagta gctttggcta ttatcagggc 780
147 aattacgatg tgttatecac cttagccact cttgcttttg acggagcgcg tgaagcetta 840
148 ttcagcaaaag aattcatcgc cgccatgaaa atgctacagc gcgatac 886
151 <210> SEQ ID NO: 4
152 <211> LENGTH: 907
153 <212> TYPE: DNA
154 <213> ORGANISM: Actinobacillus actinomycetemcomitans
156 <220> FEATURE:
157 <221> NAME/KEY: misc_feature
158 <222> LOCATION: (4)
159 <223> OTHER INFORMATION: N stands for any nucleotide.
161 <220> FEATURE:
162 <221> NAME/KEY: misc_feature
163 <222> LOCATION: (9)
164 <223> OTHER INFORMATION: N stands for any nucleotide.
166 <220> FEATURE:
167 <221> NAME/KEY: misc_feature
168 <222> LOCATION: (21)
169 <223> OTHER INFORMATION: N stands for any nucleotide.
171 <220> FEATURE:
172 <221> NAME/KEY: misc_feature
173 <222> LOCATION: (23)
174 <223> OTHER INFORMATION: N stands for any nucleotide.
176 <220> FEATURE:
177 <221> NAME/KEY: misc_feature
178 <222> LOCATION: (29)
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/980,845A

DATE: 01/18/2006

TIME: 15:36:00

Input Set : A:\seqlistcorrected.2002.06.21.txt

Output Set: N:\CRF4\01182006\I980845A.raw

179 <223> OTHER INFORMATION: N stands for any nucleotide.
 181 <220> FEATURE:
 182 <221> NAME/KEY: misc_feature
 183 <222> LOCATION: (32)
 184 <223> OTHER INFORMATION: N stands for any nucleotide.
 186 <220> FEATURE:
 187 <221> NAME/KEY: misc_feature
 188 <222> LOCATION: (35)..(36)
 189 <223> OTHER INFORMATION: N stands for any nucleotide.
 191 <220> FEATURE:
 192 <221> NAME/KEY: misc_feature
 193 <222> LOCATION: (39)
 194 <223> OTHER INFORMATION: N stands for any nucleotide.
 196 <220> FEATURE:
 197 <221> NAME/KEY: misc_feature
 198 <222> LOCATION: (42)
 199 <223> OTHER INFORMATION: N stands for any nucleotide.
 201 <220> FEATURE:
 202 <221> NAME/KEY: misc_feature
 203 <222> LOCATION: (45)
 204 <223> OTHER INFORMATION: N stands for any nucleotide.
 206 <220> FEATURE:
 207 <221> NAME/KEY: misc_feature
 208 <222> LOCATION: (49)
 209 <223> OTHER INFORMATION: N stands for any nucleotide.
 211 <220> FEATURE:
 212 <221> NAME/KEY: misc_feature
 213 <222> LOCATION: (52)
 214 <223> OTHER INFORMATION: N stands for any nucleotide.
 216 <220> FEATURE:
 217 <221> NAME/KEY: misc_feature
 218 <222> LOCATION: (58)
 219 <223> OTHER INFORMATION: N stands for any nucleotide.
 221 <220> FEATURE:
 222 <221> NAME/KEY: misc_feature
 223 <222> LOCATION: (61)..(62)
 224 <223> OTHER INFORMATION: N stands for any nucleotide.
 226 <220> FEATURE:
 227 <221> NAME/KEY: misc_feature
 228 <222> LOCATION: (65)
 229 <223> OTHER INFORMATION: N stands for any nucleotide.
 231 <220> FEATURE:
 232 <221> NAME/KEY: misc_feature
 233 <222> LOCATION: (69)
 234 <223> OTHER INFORMATION: N stands for any nucleotide.
 236 <220> FEATURE:
 237 <221> NAME/KEY: misc_feature
 238 <222> LOCATION: (73)
 239 <223> OTHER INFORMATION: N stands for any polynucleotide.

*"N" can only
 represent a
 single
 nucleotide*

RAW SEQUENCE LISTING

DATE: 01/18/2006

PATENT APPLICATION: US/09/980,845A

TIME: 15:36:00

Input Set : A:\seqlistcorrected.2002.06.21.txt

Output Set: N:\CRF4\01182006\I980845A.raw

```

241 <220> FEATURE:
242 <221> NAME/KEY: misc_feature
243 <222> LOCATION: (97)
244 <223> OTHER INFORMATION: N stands for any nucleotide.
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: (102)
248 <223> OTHER INFORMATION: N stands for any nucleotide.
249 <220> FEATURE:
250 <221> NAME/KEY: misc_feature
251 <222> LOCATION: (138)
252 <223> OTHER INFORMATION: N stands for any nucleotide.
253 <220> FEATURE:
254 <221> NAME/KEY: misc_feature
255 <222> LOCATION: (457)
256 <223> OTHER INFORMATION: N stands for any nucleotide.
257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (459)
260 <223> OTHER INFORMATION: N stands for any nucleotide.
261 <220> FEATURE:
262 <221> NAME/KEY: misc_feature
263 <222> LOCATION: (457)
264 <223> OTHER INFORMATION: N stands for any nucleotide.
265 <220> FEATURE:
266 <221> NAME/KEY: misc_feature
267 <222> LOCATION: (457)
268 <223> OTHER INFORMATION: N stands for any nucleotide.
269 <220> FEATURE:
270 <221> NAME/KEY: misc_feature
271 <222> LOCATION: (457)
272 <223> OTHER INFORMATION: N stands for any nucleotide.
273 <220> FEATURE:
274 <221> NAME/KEY: misc_feature
275 <222> LOCATION: (457)
276 <223> OTHER INFORMATION: N stands for any nucleotide.
277 <220> FEATURE:
278 <221> NAME/KEY: misc_feature
279 <222> LOCATION: (457)
280 <223> OTHER INFORMATION: N stands for any nucleotide.
281 <220> FEATURE:
282 <221> NAME/KEY: misc_feature
283 <222> LOCATION: (457)
284 <223> OTHER INFORMATION: N stands for any nucleotide.
285 <220> FEATURE:
286 <221> NAME/KEY: misc_feature
287 <222> LOCATION: (457)
288 <223> OTHER INFORMATION: N stands for any nucleotide.
289 <220> FEATURE:
290 <221> NAME/KEY: misc_feature
291 <222> LOCATION: (457)
292 <223> OTHER INFORMATION: N stands for any nucleotide.
293 <220> FEATURE:
294 <221> NAME/KEY: misc_feature
295 <222> LOCATION: (457)
296 <223> OTHER INFORMATION: N stands for any nucleotide.
297 <220> FEATURE:
298 <221> NAME/KEY: misc_feature
299 <222> LOCATION: (457)
300 <223> OTHER INFORMATION: N stands for any nucleotide.

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W--> 272 ttgataccnt agccgctgac nanaactanc angcnatgna tnatntcgna tnattaamat 60
273 nngcnagngg cancgctta cctttgcgga cggttcnctg tntgaaagcg ccattcgcaa 120
274 agtgccgggt gagcgngga aaattcactc acttggtgag gaaggcaatg atgtgggatt 180
275 gaaagcccat catggcgggg ggataaagcg ttatttttta tgtoggcaga tgcctttcct 240
276 gcgttaaatg cgttattaga cgaaaatttt tcgtatcagg acacagcagt ttacggcgag 300
277 aattttgtgg ttccgcgct gaatgaagat tccgtgtgtg tgggcgatat ttatcaaatc 360
278 ggctcctgag tgggtggaggt gtccgagcgc cgtaaacctt gtgagcgctt atcgaaaaat 420
279 accaataatc cgaacacgca acaaaccgtg tacgctneng cgggtcnggc tggatatgtg 480
280 cgggtgtacc ccaaggggga aattcaa 507
283 <210> SEQ ID NO: 5
284 <211> LENGTH: 1087
285 <212> TYPE: DNA
286 <213> ORGANISM: Actinobacillus actinomycetemcomitans
288 <220> FEATURE:
289 <221> NAME/KEY: misc_feature
290 <222> LOCATION: (622)
291 <223> OTHER INFORMATION: N stands for any nucleotide.
293 <220> FEATURE:
294 <221> NAME/KEY: misc_feature
295 <222> LOCATION: (642)
296 <223> OTHER INFORMATION: N stands for any nucleotide.
298 <220> FEATURE:
299 <221> NAME/KEY: misc_feature
300 <222> LOCATION: (651)

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/980,845A

DATE: 01/18/2006
TIME: 15:36:01

Input Set : A:\seqlistcorrected.2002.06.21.txt
Output Set: N:\CRF4\01182006\I980845A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 566, 625, 627, 636, 650, 656, 661, 672, 681, 720, 723 /
Seq#:3; N Pos. 554, 596 /
Seq#:4; N Pos. 4, 8, 21, 23, 29, 32, 35, 36, 39, 42, 45, 49, 52, 55, 61, 62, 65, 69, 73, 97 /
Seq#:4; N Pos. 102, 138, 457, 459, 467 /
Seq#:5; N Pos. 622, 642, 661, 669, 685, 690, 700 /
Seq#:5; N Pos. 609, 614, 651, 665 /
Seq#:7; N Pos. 532, 630, 696, 710, 722, 725 /
Seq#:8; N Pos. 538 /
Seq#:12; N Pos. 131, 151, 170, 178, 194, 199, 209 /
Seq#:18; Xaa Pos. 43, 50, 59, 66, 69 /

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/980,845A

DATE: 01/18/2006

TIME: 15:36:01

Input Set : A:\seqlistcorrected.2002.06.21.txt

Output Set: N:\CRF4\01182006\I980845A.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
 L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
 L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:540
 M:341 Repeated in SeqNo=1
 L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:540
 L:272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
 M:341 Repeated in SeqNo=4
 L:334 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:600
 M:341 Repeated in SeqNo=5
 L:381 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:600
 M:341 Repeated in SeqNo=6
 L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:480
 M:341 Repeated in SeqNo=7
 L:456 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:480
 L:551 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:120
 M:341 Repeated in SeqNo=12
 L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:32
 M:341 Repeated in SeqNo=18



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